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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
SHAFFER, ERIC T

ART UNIT	PAPER NUMBER
2163	

DATE MAILED: 04/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.		Applicant(s)	
Office Action Summary	09/474,631	●	SAMRA ET AL.	
	Examiner		Art Unit	
	Eric Shaffer		2163	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>12/29/1999</u> .

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-19</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-19</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
        application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒	Notice of References Cited (PTO-892)		4) ☐	Interview Summary (PTO-413) Paper No(s). _____ .	
2) ☐	Notice of Draftsperson's Patent Drawing Review (PTO-948)		5) ☐	Notice of Informal Patent Application (PTO-152)	
3) ☒	Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3</u> .		6) ☐	Other:	

DETAILED ACTION

1.   The following is an initial Office Action upon examination of the above-identified

application on the merits. Claims 1 – 19 are pending.

Claim Objections

2.   **Claim 1** is objected to because of the following informalities:

Line 2, the acronym OLAP should be defined at first usage in the claims.

Lines 4 and 6, the word "models" should read --model's-- if singular, or --models'-- if plural.

3.   **Claim 7** is objected to because of the following informalities:

Line 24, the word "models" should read --model's-- if singular, or ---models'-- if plural.

4.   **Claim 9** is objected to because of the following informalities:

Line 5, the second occurrence of the word "and" should be deleted.

5.   **Claims 10 - 19** are objected to under 37 CFR 1.75(c), as being of improper dependent

form for failing to further limit the subject matter of a previous claim. Applicant is required to

cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or

rewrite the claim(s) in independent form.

All new apparatus claims must be structurally distinguishable from the prior art (see

MPEP 2114). Claims 10 – 19 differ in functionality from claim 9, but are not structurally

distinguishable, do not further limit the apparatus, and are therefore objected to.

Claim Rejections - 35 USC § 112

6.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 – 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, line 4 the word "can" is considered too vague and indefinite to offer a positive limitation on the claim. For example, it is not clear whether or not the gains charts are actually segmented.

7.   **Claim 1**, line 6 it is not clear if the "models performance" refers to the "models" mentioned in column 1, line 4. The grammar should be fixed to resolve this issue.

Claim 7, line 23 possesses a similar issue.

Claims 2 – 8 are dependent on claim 1 and suffer from the same deficiency as their base claim due to dependency and inherit the same rejections applied under 35 USC 112, second paragraph.

8.   **Claim 9** is a system claim, yet it recites "optimal targeting using models", which is not a device per se. Does the applicant intend to claim an "optimal targeting engine" using models instead?

Claims 10 – 19 are dependent on claim 9 and suffer from the same deficiency as their base claim due to dependency and inherit the same rejections applied under 35 USC 112, second paragraph.

Clarification is required.

Claim Rejections - 35 USC § 102

9.　　The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> (e) the invention was described in a patent granted on an application for patent by another filed in the United
> States before the invention thereof by the applicant for patent, or on an international application by another who
> has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention
> thereof by the applicant for patent.

Claims 1 – 9 and 11 - 19 are rejected under 35 U.S.C. 102(e) as being anticipated by

Verba et al. (U.S. 6,236,977).

10.　　**Claim 1** consists of evaluating models using structures that can segment gain charts to

discover where a model is under performing and analyze performance over time to discover user

defined trends.　Verba anticipates this by disclosing a marketing system, a data structure for the

storage and retrieval of various campaign data, and a feedback loop between outbound

campaigns and inbound campaigns such that the results of inbound campaigns can be used to

monitor and improve the effectiveness of outbound campaigns (column 2, line 45 – 54).

11.　　**Claim 9** describes a system comprising of a database of historical campaign results with

a graphical user interface to present trend analysis and optimal targeting using models.　Verba

anticipates this by disclosing a historical database of previous and actual predicted resource

values (column 23, line 58-62) which has several interfaces by which the user may input and

read information from the system (column 4, lines 14-18) and uses a prediction engine to access

said listing population data store and includes an historical database of previous actual values

(column 23, line 58 - 62) and has an optimization engine that uses multiple feedback loops to

perform optimal targeting and to improve subsequent modeling cycles (column 10,

lines 21 - 23).

12.   **Claims 2 and 12** describe the step of determining profitability over time. Verba anticipates this by disclosing a database that stores product sales prices (column 20, line 62) as well as a model that calculates average margin (column 21, line 12). Since average margin is a measure of profitability, calculated by dividing profit by sales price, profitability is inherently taken into account when calculating margin.

13.   **Claim 3 and 13** describe the step of determining where a response rate changes over time. Verba anticipates this by disclosing a system that measures response rate by calculating what percentage of sales leads became listings, what percentage of leads became deals and what percentage of listings became deals in a specific time interval (column 21, lines 18 – 24).

14.   **Claims 4 and 14** describe the step of determining when a number of accounts have been closed. Verba teaches a system that measures response rate by calculating what percentage of sales leads became listings, what percentage of leads became deals and what percentage of listings became deals in a specific time interval (column 21, lines 18 – 24). A lead that does not become a deal is a type of closed account; therefore Verba teaches the determination of where a number of accounts are being closed.

15.   **Claims 5 and 16** describe the step of evaluating models by creating historical structures based on user defined attributes. Verba anticipates this by disclosing a campaign engine with access to historical data, which has a broker interface by which a broker may specify and store rules to be reflected in at least one marketing campaign and a customer interface for the input and storage of customer attributes (column 24, lines 55 – 61).

16.   **Claims 6, 11 and 17** describe the step of discovering user-defined trends by analyzing a particular population segment. Verba anticipates this by disclosing a campaign engine that stores

and retrieves attributes reflecting the readiness and desires of selected members of the public and

leads corresponding to selected members of the public (column 24, lines 44 - 48). Verba also

discloses an object model that captures the positioning of valuable items into marketing

segments (column 16, lines 58 – 59).

17.   **Claims 7 and 18** describe maintaining feedback into a targeting engine to improve

subsequent marketing cycles. Verba anticipates this by disclosing multiple feedback loops that

allow the system to be self-tuning (column 10, lines 21 - 23) and uses adaptive scoring, which

alters the scoring process based on relationships among the campaign attributes (column 22,

lines 46 - 52).

18.   **Claim 15** describes determining the likelihood of a customer to make additional

purchases over time. Verba anticipates this by disclosing a database and prediction engine that

accesses the data structures to issue predictions based on historical data (column 3, lines 57 – 60)

and declares that the system can determine what customers have provided the broker with repeat

business in the last year (column 21, lines 18 – 19).

Claim Rejections - 35 USC § 103

19.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

20.   **Claims 8 and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Verba et al (U.S. 6,236,977) as applied to claims 1 – 9 and 11 - 19 above, and further in view of the Barry de Ville article "Direct Marketing with ModelMax" from the Spring 1996 issue of *Marketing Research.* Verba teaches a database modeling system where different kinds of information can be input to and read from the system (column 4, lines 16 – 17) but does not specifically teach using gains charts for performance analysis. De Ville discloses a direct marketing campaign evaluation software product called ModelMax where "The primary validation tool provided by ModelMax is the lift or gains chart" (paragraph 23, sentence 3). It would be obvious to one of ordinary skill in the art at the time of the invention to have used the ModelMax gains charts with the Verba system in order to use gain charts to display user-defined trends and model performance in segments as output from a marketing campaign evaluation system.

21.   **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Verba et al (U.S. 6,236,977) as applied to claims 1 – 9 and 11 - 19 above, and further in view of the Microsoft Press definition of OLAP.

        Claim 10 describes a time-based, multidimensional OLAP system that uses historical structures, where OLAP is defined as online analytical processing. Verba teaches a database system uses data structures for the storage and retrieval of various campaign data to monitor and improve the effectiveness of campaigns (column 2, lines 45 – 54). Verba does not explicitly disclose the use of an OLAP structure, however, OLAP databases are commonly used in the art of data storages as exemplified by the definition of "OLAP database" found in Microsoft Press'

Computer Dictionary (3rd ed). The definition is a follows:

> A relational database system capable of handling queries more complex than those
> handled by relational databases, through multidimentional access to data (viewing the
> data by several different criteria), intensive calculation capability, and specialized
> indexing techniques.

It would be obvious to one of ordinary skill in the art at the time of the invention to have

used the OLAP database during the development and implementation of Verba's device because

of its inherent advantages of handling more complex queries than the relational databases.

Conclusion

22.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

        Website http://www.cs.uregina.ca/~dbd/cs831/notes/lift_chart/lift_chart.html because it

defines gains charts more clearly.

23.   None of the claims are allowed and all of the claims stand rejected.

24.   Any inquiry concerning this communication or earlier communications from the
Examiner should be directed to Eric Shaffer whose telephone number is (703) 305-5283. The
Examiner can normally be reached on Monday-Friday, 8:30 am - 5:00 pm.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Tariq Hafiz can be reached on (703) 305-9643.

        Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the Receptionist whose telephone number is
(703) 305-3900.

        Any response to this action should be mailed to:

                Commissioner of Patents and Trademarks
                        Washington D.C.   20231

Or faxed to:

        (703)746-7238   [After Final communications, labeled "Box AF"]

        (703) 746-7239   [Official communications]

        (703) 706-9124   [Informal/Draft communications, labeled
                                "PROPOSED" or "DRAFT"]

        Hand delivered responses should be brought to Crystal Park 2, 2121 Crystal Drive,
Arlington, VA, 4th floor receptionist.

ETS
April 1, 2002
                                                        KYLE J. CHOI
                                                        PRIMARY EXAMINER